

REMARKS/ARGUMENTS

The drawings have been objected to under 37 C.F.R. § 1.83(a) on the grounds that the hydraulic compressor has been claimed but not shown in the drawings. The reference to the hydraulic compressor in the claims has been deleted. Therefore, no amendment to the drawings is necessary and the rejection under 37 C.F.R. § 1.83(a) should be withdrawn.

Claim 9 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite by the use of the term "the same position." The new version of this claim, claim 25, the language "in a stationary position relative to the article as the apparatus is pivoted about the axis of rotation of the attachment pivot" has been substituted and is clearly spells out the relationship between the axis of the jaws and the axis on which the jaws are mounted.

Claims 1-8 and 14-16 are rejected under 35 U.S.C. § 102(b) as being anticipated by Pardoe. Claims 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Pardoe in view of Detriche. The method claims 10-13 are rejected as being considered inherently unpatentable in view of the rejection of claim 9.

Applicant respectfully traverses these rejections based on the amended claims submitted herewith and these remarks.

Applicant notes that it has cancelled each of the claims 1-16 in favor of new claims 17-29, specifically directed to an apparatus for breaking railway rails into short lengths

suitable for being removed from the railway bed or scrap yard and recycled. Applicant submits that these new claims clearly distinguish over the cited prior art.

Certain distinctions between the cited Pardoe patent and the claimed invention are important to note.

First, the Pardoe apparatus is a shear. It is intended for shearing sheet metal and other relatively soft metals in a manner similar to a pair of scissors. The blades of the Pardoe shear are intended to slice through the material, cutting it into smaller pieces. For this reason, the bottom jaw of the Pardoe shear is split so that the single top blade passes through the material and into the space between the bottom jaws, shearing the metal as this occurs. The shear has relatively long jaws and blades that slice through the metal as the jaws are progressively closed on the material. This is in distinct contrast to the short, single upper and lower jaws of the claimed invention.

Second, the effective length of the jaws in the Pardoe apparatus are several times the height of the workpiece that can be cut, not, as asserted by the Examiner, less than the height of the workpiece. This is clear from the drawings. The smallest Pardoe shear has a length of 12 inches from the tip of the jaw to the end of the jaw, in contrast to the height of a standard railway rail of 6.5 inches. Other Pardoe shears have even much greater jaw lengths.

Third, the Pardoe shear must pick up the workpiece and cause it to slide a sufficient distance rearwardly to cause the blades to shear the workpiece. This is not required in the claimed invention as now claimed.

As claimed, the apparatus is recited as an apparatus for breaking railroad rails. This functional requirement leads to several patentably distinct structural requirements not disclosed in the prior art. First, railway rails are made of very hard, relatively brittle steel. They cannot be "sheared" by a device such as the Pardoe shear. The conventional prior art manner of reducing the length of scrap rails is by using a cutting torch--a slow, expensive and dangerous process by which the rail is cut by melting a thin slice of the rail to sever it from a longer length.

Second, the invention as now claimed is operated by placing the first and second jaws on opposite sides of the wearing flange, i.e., the top of the rail on which the wheels of the rail cars ride, and then bringing the jaws together while holding the rail stationary. The wearing flange of the rail is positioned into the jaws as far as it will go and engages the inner end of the jaws at the pivot axis before the breaking movement of the jaws begins. In this position, the converging movement of the first and second jaws engages the wearing flange of the rail, but not the web or base flange.

Third, the claimed invention does not shear or cut the rail. Rather, it causes the wearing flange to fracture along the area engaged by the jaws. The brittle nature of the steel causes the web and base flange to fracture simultaneously. This all happens very

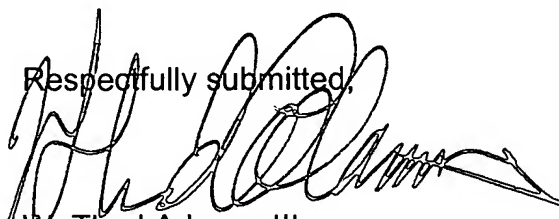
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quickly--much more quickly than by cutting the rail with a cutting torch. The jaws can then be used to pick up the severed section of rail and place it in a recycling bin or other container.

The distinction between the Pardoe shear and the claimed invention is clearly shown in the two compact disks submitted with this response for consideration by the Examiner. Note the contrast between the progressive shear jaw movement and shearing action in the Pardoe shear with the short, sharp, breaking action of the jaws in the claimed invention. In contrast to Pardoe, the jaw movement of the claimed invention is almost imperceptible. It is the force of the jaws exerted directly against the opposite sides of the wearing flange of the rail that causes the fracture, not a progressive shearing action as in the Pardoe shear.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. Thad Adams, III', with a long, sweeping horizontal stroke extending to the right.

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